2003 Consumer Confidence Report

A public service provided by the City of San Bruno, the Peninsula City of choice in which to live, learn, work, shop and play.

The City of San Bruno is proud to provide our customers with the annual Consumer Confidence Report (CCR). This year's report is in compliance with new regulations of the 1998 Safe Drinking Water Act (SDWA) reauthorization that charges the U.S.



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Environmental Protection Agency (U.S.EPA) with updating and strengthening the tap water regulatory program. This report presents water quality and supply information for 2003. During 2003 the City and San Francisco Public Utilities Commission (SFPUC) monitored the water quality of both source and treated water supplies. The City of San Bruno wants you, the customer, to know that your water system has met all water quality standards established by the U.S.EPA and the California Department of Health Services (DOHS).



The report on the following pages provides important information about your drinking water including:

- Where our water comes from (page 2)
- Water quality (page 3)
- Water treatment (page 4)
- How water sources can become polluted (page 5)
- Water Quality Data for 2003 (pages 6 and 7)
- Water System Improvements (page 8)

How Can the Public Be Involved?

Meetings of the City of San Bruno City Council begin at 7:00 PM on the second and fourth Tuesdays of each month and are open to the public. Meetings are held at the San Bruno Senior Center located at 1555 Crystal Springs Rd.

If you have any questions or need further information, please feel free to contact the City of San Bruno Water Division at (650) 616-7162, or by mail at City of San Bruno Water Division, 567 El Camino Real, San Bruno, CA 94066-4247. A copy of the 2003 Consumer Confidence Report will also be posted on the City's website at www.sanbruno.ca.gov.

Decisions about SFPUC water quality issues are made from time to time in public meetings held at San Francisco City Hall, 1 Doctor Carlton B. Goodlett Place, Room 400, San Francisco CA 94102. Inquiries about these meetings may be directed to the Office of the Commission Secretary at (415) 554-3165. Additional information about the SFPUC water quality may be obtained by calling (877) 737-8297. or by going to their website at www.sfwater.org.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

此份有关你的食水报告,内有重要资料和讯息,请找 他人为你翻译及解释清楚。

Where Our Water Comes From

Throughout this report customers will be able to find useful information specifically related to the City of San Bruno water system, as well as information related to drinking water in general. The primary mission of this report is to summarize the past year's water quality data (found on page 6 and 7 of this brochure). You will also find valuable information about our current operations as well as changes and improvements to the water system. The City of San Bruno continues its commitment to provide you with safe, high quality drinking water.

Sources of Our Water

The supply of water for the City of San Bruno is derived from two (2) primary sources, surface water and deep wells, which are blended throughout the distribution system. Water purchased from the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy System consists of surface flows that originate in the snow capped peaks of Yosemite National park and the Stanislaus National Forest. Because this source is located in the mountain wilderness with limited human access, the quality and purity of this water is consis-

tently high. This water is stored in a system of reservoirs in the Sierras, and is transported 150 miles across the San Joaquin Valley and through the Coast Range mountains via a series of Pipelines and tunnels to the Bay Area. San Bruno-produced well water is obtained from deep wells located within the City that are capable of producing approximately one-half of our annual water supply.

Conjunctive Use Study

The City of San Bruno has joined with other public water agencies that pump water from the Westside Basin Aquifer that lies under the northern San Francisco Peninsula to perform a study of the long-term effects that various well pumping scenarios would have on underground water levels, and, in the northern areas, the impacts to Lake Merced water levels. Conjunctive use is a term applied to the practice of using the combined resources of groundwater and surface waters to meet the needs of the area.

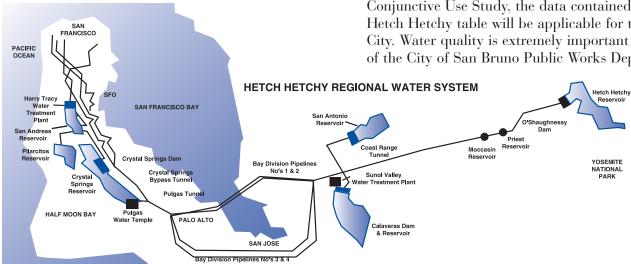
Westside Groundwater Basin



As participants in the 2- to 3-year study, San Bruno, San Francisco, Daly City, and California Water Service have agreed to cease pumping groundwater for up to three years during periods when ample surface water supplies exist in the Hetch Hetchy system. This will allow geologists to begin to understand how the aquifer responds to reductions in pumping and whether it can ultimately be used to store drinking water during wet years. The City's wells were shut down on January 28, 2003, and remained off until November 12, 2003 (when a temporary interruption to the

Hetch Hetchy supplies began). The wells were shut down again on April 16, 2004, for the purpose of the study.

The impacts to water quality will be minimal with the possible exception of the hardness of the water (well water is slightly "harder" than surface water). On page 6 and 7, you will find two separate tables of water quality data for 2003 - one for well water, the other for Hetch Hetchy water. For the period of the Conjunctive Use Study, the data contained in the Hetch Hetchy table will be applicable for the entire City. Water quality is extremely important to the staff of the City of San Bruno Public Works Department.



Water Division employees are State Health Department certified Grade 1 and Grade 2 Water Treatment Operators and the Water Service Manager has a Grade 3. All employees have Grades 3 or 4 Distribution Certifications. The Water Division maintains a laboratory and conducts or supervises more than 700 analyses of water samples each year. The staff sample daily from water sources, treatment facilities and distribution systems throughout our service area. Using state of the art laboratory equipment capable of measuring minute quantities of contaminants in the parts-per-million range, samples are analyzed on a routine basis to insure that water quality standards are met and maintained. Additional samples are delivered to a contracted State certified independent laboratory for further analysis. You can be assured that your drinking water consistently meets or exceeds established quality standards.

Safeguarding your water supply

Securing our water facilities has always been a top priority. Please be assured that we are taking every precaution to protect the public water supply against a possible terrorist attack. We are working with law enforcement agencies, public health officials, other water utilities and the Department of Homeland Security to ensure our water supply is protected. We have raised our level of security and have implemented additional security measures as warranted. Examples of security measures include fully enclosed and alarmed water storage facilities, 24 hour security monitoring, an expanded system of alarms and daily water quality sampling.

Source protection

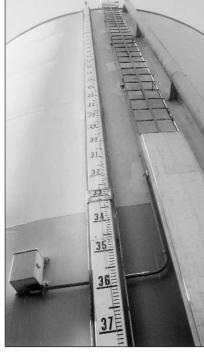
Source protection is the primary barrier, the first line of defense against contamination of your drinking water at its source. Hetch Hetchy Reservoir, which is the largest reservoir in the SFPUC system, is located in Yosemite National Park. It provides approximately 85 percent of the total water supply. Spring snowmelt flows down the Tuolumne River and fills the reservoir. The high quality Hetch Hetchy water supply meets all federal and state criteria for watershed protection, disinfection treatment, bacteriological quality and operational standards. The SFPUC strictly controls activities on the watershed lands around their reservoirs, limiting activities to those compatible with maximum protection of the water quality. As a result, the U.S. Environmental Protection Agency (U.S. EPA) and California Department of Health Services (DOHS) granted the Hetch Hetchy water source a filtration exemption. This exemption is contingent upon the Hetch Hetchy water quality continuing to meet all filtration avoidance criteria.

The SFPUC aggressively protects the natural water resources entrusted to its care, and continuously monitors Hetch Hetchy watershed weather conditions, water turbidity levels, microbial contaminants and aqueduct disinfectant levels. The SFPUC complies with monitoring and reporting requirements to protect its watersheds, and updates its watershed sanitary surveys for the Hetch Hetchy supply annually. The 2003 annual update on Watershed Control Program and Sanitary Survey describes the watersheds and water supply system, identifies potential sources of contamination in the watersheds, discusses the existing and recommended watershed management practices that protect water quality, and summarizes the

water quality monitoring conducted.

The SFPUC also completed a detailed drinking water source assessment in 2000. The assessment showed that SFPUC watersheds have very low levels of contaminants, and those contaminants found are associated with wildlife and, to a limited extent, human recreational activity.

San Bruno's groundwater is drawn from a deep aquifer more than 200 feet below the surface. It is protected from contamination by impervious layers of clay deep in the ground. The



soil layers filter contaminants borne by surface water and shallow groundwater that may eventually reach the aquifer before it reaches the well locations. The wells themselves are constructed to meet strict standards imposed by San Mateo County Environmental Health Division to ensure that no surface water or shallow groundwater can enter the aquifer at those points. In cooperation with San Mateo County Environmental Health Division, San Bruno participates in a wellhead protection program established to ensure the long-term protection of the quality of San Bruno's groundwater resources.

Water Treatment

Water Treatment is the next layer of protection of our drinking water. When the wells were in operation during 2003, the water was injected with sodium hypochlorite (liquid chlorine) solution at the wellhead to ensure proper disinfection. Also, our well water is sampled to ensure the health and safety of our consumers. In addition, our Forest Lane Well is equipped with a filtering plant to remove iron and manganese and adjust pH levels prior to distribution to our customers. This is to ensure that water from this particular well meets or exceeds all Secondary Drinking Water Standards as set by the DOHS.

Water System Operations

Effective operation and maintenance of the distribution system assures that the water maintains its quality as it travels through the system to your tap. The disinfectant residual in the water after treatment prevents the regrowth of microbial organisms during storage and transmission of water in the distribution system. The flushing of our water mains and rotation of stored supplies also keeps the water fresh and limits the possibility for growth of such organisms. San Bruno conducts mandatory weekly water quality testing of the distribution system to ensure that the City's drinking water continues to be safe and healthy.

San Bruno also maintains an active cross connection control program to prevent the intrusion of potentially harmful materials into the drinking water system. Cross connection control is done by isolating hazards (boilers, cooling towers, fire sprinklers, etc.) from the drinking water supply by installing approved backflow prevention devices.

Changes to Water Treatment Process

The City was busy in 2003 preparing to switch its disinfection process from chlorine to chloramine (a combination of chlorine and ammonia). This change, which was done concurrently with the SFPUC switchover, was made necessary to meet the tougher U.S.EPA drinking water standards related to potentially harmful by-products of the chlorine process. The actual switchover occurred during the first week of February 2004.

Activities during 2003 included a massive public outreach campaign including a kickoff press conference by the SFPUC in January, a dedicated website launch in February, no less than 6 different mailings to medical facilities, pet shops, restaurants, businesses and industry, and the general population. The City, as well as the SFPUC, completed significant modifications to the water works, and adopted new operational procedures to ensure that the highest quality of drinking water continues to flow to our customers.

For more information related to this new disinfectant process, visit our website at http://sanbrunowater.ca.gov or call the Public Works Department at 650-616-7065.

Special Waiver Requested

As part of the new regulation governing disinfection by-products, the U.S. Environmental Protection Agency (U.S. EPA) has developed a new drinking water standard for a group of five haloacetic acids (HAA5) and lowered the current standard for a group of four trihalomethanes (TTHM). Water systems were required to meet these new standards starting in January 2002. Currently, while operating under optimum conditions, the San Francisco Regional Water System (SFRWS), the system that we purchase half of our water from, cannot meet the new standard on a consistent basis.

To address this, San Francisco Public Utilities Commission (SFPUC), which operates the SFRWS, constructed new chloramination facilities. Under the new regulation, EPA allows for a two-vear extension to comply with the new standard if capital improvements are necessary to meet the new standard. Since San Bruno receives approximately half of its water from SFPUC, we also applied for and received a twovear extension. Under the extension, we will still have to meet all of the monitoring requirements and notify the public if the state standard for TTHM is exceeded. The City of San Bruno did not exceed the State standard during the time of the waiver. In addition, SFPUC was required to meet the deadlines in a U.S.EPA-developed construction schedule. The waiver expired on January 1, 2004, and the SFPUC switched over to Chloramine disinfectant approximately 4-weeks later.

PROTECTING YOUR HEALTH

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the U.S. EPA Safe Drinking Water Hotline (800) 426-4791 or on U.S.EPA's website <u>epa.gov/safewater</u>.

How Do Water Sources Become Polluted?

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Although the presence of small amounts of these substances does not necessarily indicate that the water poses a health risk, extensive monitoring and testing of the drinking water is done to assure the safety of our customers.

Contaminants that may be present in source water include:

- Microbial Contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic Contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S.EPA and DOHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DOHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Unregulated Contaminant Monitoring helps the U.S.EPA and DOHS to determine where certain contaminants occur and whether the contaminants need to be regulated. During 2001, the SFPUC and the City of San Bruno monitored as many as twelve unregulated contaminants including MTBE, perchlorate, herbicides, and pesticides. These contaminants were not detected in any SFPUC or City of San Bruno supplies.

The City of San Bruno has met all DOHS requirements for the State's Unregulated Contaminant Monitoring Rule (UCMR), but failed to meet the December 31, 2003, deadline for the U.S.EPA's separate, but parallel, UCMR. Subsequent to that deadline, the City completed the first of its two monitoring and reporting cycles, and once again, found no trace of the contaminants listed for monitoring.

In making significant modifications to its disinfectant processes, the City integrated all new treatment monitoring equipment into its expanded Supervisory Control and Data Aquisition (SCADA) system, thereby adding another level of safety to drinking water quality. Other improvements include pipelines, regulating stations, and an additional well that will further provide the system's managers with more flexibility and capacity to operate the system to the best advantage of the customer.

What you should know about Cryptosporidium & Giardia

Cryptosporidium and Giardia are parasitic microbes found in most surface water supplies that can pose a potential health threat. If ingested, either may produce symptoms of diarrhea, stomach cramps, upset stomach, and slight fever. Some people are more vulnerable to Cryptosporidium and Giardia than others, especially those with compromised immune systems. The SFPUC tests regularly for Cryptosporidium and Giardia in both source and treated water supplies. Both were occasionally found at very low levels in the SFPUC's water in 2003. San Bruno's well water is not susceptible to these types of microbes.

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants, including

Cryptosporidium and Giardia. The presence of small amounts of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the U.S.EPA Safe Drinking Water Hotline at (800) 426-4791.



Lead and Copper

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. It is also recommended that residents who are concerned about elevated lead levels run their tap 30 seconds to 2 minutes before use. Additional information is available from the Safe Drinking water hotline (800) 426-4791 or at the U.S.EPA's website www.epa.gov.

San Bruno has tested for lead and copper in the city supply since 1992 as part of the Lead and Copper Rule monitoring program. During 2002 over 30 volunteers took water samples at the tap in their homes, which were then analyzed for lead and copper content as well as for the corrosive nature of the water. It should be noted that the water San Bruno delivers to its customers does not contain lead, but it may acquire lead from older soldered pipe joints in household plumbing. Note: San Bruno plans to conduct another round of lead and copper testing in the summer months of 2004.

2003 Annual Water Quality Report

DETECTED CONTAMINANTS	Unit	MCL (3)	PHG (4)(5) (MCLG)	San Bruno Well Water Range Average		MAJOR SOURCES IN DRINKING WATER		
PRIMARY DRINKING WATER STANDARDS		•						
DISINFECTION BY-PRODUCTS (DBPs)								
Total Trihalomethanes (TTHMs) - City of San Bruno & Hetch Hetchy Distribution System	ppb	80 (6)	NS	59.1-60.2	59.6 (7)	By-product of drinking water chlorination		
Total Halocetic Acid (HAA5) - City of San Bruno & Hetch Hetchy Distribution System	ppb	60 (6)	NS	17.4-19.7	19.3	By-product of drinking water chlorination		
RADIONUCLIDES		•			'			
Gross Alpha particle	pCi/L	15	NS	0.1-1.0	0.38	Erosion of natural deposits		
Gross Beta particle	pCi/L	50	NS	0-3	1.5	Erosion of natural deposits; decay of natural and man-made deposits		
INORGANIC CHEMICALS					•			
Nitrate (as NO3) (1)	ppm	45	45	0.26-5.5	3.08	Run-off and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Chlorine	ppm	MRDLG =4 (8)	MRDL=4 (8)	0.01-1.48	0.37	Drinking water disinfectant added for		
LEAD AND COPPER RULE STUDY	UNIT	AL	PHG		90th Percer	tile Level (9)		
Copper - City of San Bruno Tap Water	ppb	1300	170	5-200	110	Leaching from natural deposits; discharge from mining and industrical waste; leaching from copper pipes		
Lead - City of San Bruno Tap Water	ppb	15	2	<2.0-4.3	<2.0	Corrosion of household plumbing systems, erosion of natural deposits		
Action Level(AL). The last round of	samples v	vere collected in Ju	ly 2002. 35 site	s were tested	for lead and o	copper and all samples were below the action levels.		

SECONDARY MAXIMUM CONTAMINANT L	EVELS - Consun	ner Acceptance	Limits			
Chloride	ppm	500	NS	29-107	75	Run-off/leaching from natural deposits; seawater influence
Color	unit	15	NS	<5-29	6	Naturally-occuring organic materials
Iron	ppm	0.3	NS	<0.05	<0.05	Leaching from natural deposits; industrial wastes
Manganese	ppm	0.05	NS	<0.01	0.05	Leaching from natural deposits
Odor Threshold	TON	3	NS	<1-1	<1	Naturally-occuring organic materials
Specific Conductance	μS/c m	1600	NS	470-830	665	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NS	20-75	49	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NS	250-464	370	Runoff/leaching from natural deposits

ADDITIONAL CONSTITUENTS ANALYZED						
Alkalinity (as CaCO3)	ppm	NS	NS	128-186	156	
Calcium	ppm	NS	NS	29-56	39	Note:
Hardness (as CaCO3)	ppm	NS	NS	152-284	222	These additional constituents do not affect health.
Magnesium	ppm	NS	NS	18-35	23	They are tested because they can affect color,
рН	unit	NS	NS	7.2-8.9	7.97	taste and/or odor of water.
Potassium	ppm	NS	NS	3.4-4.3	3.9	
Silica	ppm	NS	NS	25-30	27.5	
Sodium	ppm	NS	NS	36-53	46	

Miscellaneous Water Quality Notes

- ▶ Methyl-tert-Butyl Ether (MTBE) was tested at all City Wells on a quarterly basis in 2003 and none was detected.
- ▶ Trichloroethylene (TCE) was tested at all City Wells on a quarterly basis in 2003 and none was detected.
- Total coliform samples were collected on a weekly basis throughout the distribution system. A total of 676 samples in 2003 and all tested negative

Footnotes:

- (1) Nitrate: Nitrate in drinking water levels above 45 ppm is a health risk for infants of less than six months of age.
 - Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness;
 - systems include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood
 - to carry oxygen in other individuals, such as pregnant woman and those with certain specific enzyme deficiencies. If you are caring for an infant, or are pregnant, you should ask advice from your health care provided.
- (2) As a result of the 2 year extension on DBP rule, a new testing proram has been developed beginning January 2002.
- (3) Maximum Contaminant Level (MCL) and Secondary Maximum Contaminant Level (SMCL) set by U.S. EPA/DOHS
- (4) Public Health Goal (PHG) adopted by the State Office of Environmental Health Hazard Assessment (OEHHA) of the California EPA
- (5) Maximum Contaminant Level Goal (MCLG) set by U.S. EPA
- (6) 4-quarter running annual average in City of San Bruno treated water.
- (7) Data obtained from 4-quarter running annual average of 8 locations in City of San Bruno Water System.
- (8) MRDL = Maximum Residual Disinfectant Level, MRDLG = Maximum Residual Disinfectant Level Goal.
- (9) The 90th percentile level of lead or copper must be less than the action level.

Additional SFPUC Water Quality Data 2003

SFPUC supplied Fluoridated Water

(HTWTP water or blend of SVWTP and Hetch Hetchy waters)

DETECTED CONTAMINANTS	Unit	MCL	PHG (MCLG)	Range	Average (Maximum)	Typical Sources in Drinking Water
TURBIDITY (2)						
Unfiltered Hetch Hetchy Water	NTU	5 ⁽³⁾	NS	0.24 - 0.74 (4)	(1.58) ⁽⁵⁾	Soil run-off
Filtered Water - Harry Tracy WTP, max turbidity	NTU	1	NS	-	(0.12)	Soil run-off
minimum percentage of time < 0.3 NTU	%	95 ⁽⁶⁾	NS	100% ⁽⁷⁾	-	Soil run-off
Filtered Water - Sunol Valley WTP, max turbidity	NTU	1	NS	-	(0.4)	Soil run-off
minimum percentage of time < 0.3 NTU	%	95 ⁽⁶⁾	NS	99% ⁽⁷⁾	-	Soil run-off
ORGANIC CHEMICALS (8) (SFPUC transmission system	1)					
Total Trihalomethanes (TTHMs)	ppb	80	NS	20.7 - 86.2	48 ⁽¹⁰⁾	By-product of drinking water chlorination
Total Haloacetic Acids (HAAs)	ppb	60	NS	6.4 - 35.4	21.8 ⁽¹⁰⁾	By-product of drinking water chlorination
Total Organic Carbon ⁽⁹⁾	ppb	NS	NS	2.4 - 3.3	2.8	By-product of drinking water chlorination
INORGANIC CHEMICALS						
Aluminum	ppb	1000	600	<5 - 40	14	Erosion of natural deposits
Barium	ppb	1000	2000	<5 - 67	27	Erosion of natural deposits
Fluoride (11) (12)	ppm	2	1	<0.1 - 0.2	0.1	Erosion of natural deposits
Nickel	ppb	100	12	<1 - 1	<1	Erosion of natural deposits
Nitrate (as NO ₃)	ppm	45	45	<0.2 - 0.7 Erosion of natural deposits, soil run-of		Erosion of natural deposits, soil run-off

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range Average Typic		Typical Sources in Drinking Water
Chloride	ppm	500	NS	<3 - 20	12	Runoff / leaching from natural deposits
Color	unit	15	NS	<5 - 6	<5	Naturally-occurring organic materials
Iron	ppb	300	NS	<10 - 28	<10	Leaching from natural deposits
Manganese	ppb	50	NS	<2 - 5	<2	Leaching from natural deposits
Specific Conductance	μS/cm	1600	NS	15 - 340	186	Substances that form ions when in water
Sulfate	ppm	500	NS	1 - 43	18	Leaching from natural deposits
Total Dissolved Solids	ppm	1000	NS	20 - 180	99	Runoff / leaching from natural deposits
Turbidity	NTU	5	NS	0.08 - 0.5	0.22	Soil runoff

OTHER WATER QUALITY PARAMETERS	Unit	AL	Range	Average
Alkalinity (as CaCO ₃)	ppm	NS	10 - 156	49
Boron	ppb	1000	<100 - 150	<100
Calcium	ppm	NS	4 - 30	15
Hardness (as CaCO ₃)	ppm	NS	8 - 140	51
Fluoride (13)	ppm	NS	0.1 - 1.7	0.93
Magnesium	ppm	NS	<0.5 - 13	6.1
pH	Unit	NS	7.4 - 9.9	9.0
Potassium	ppm	NS	<0.5 - 2	0.9
Silica	ppm	NS	5 - 7	5.7
Sodium	ppm	NS	3 - 27	14

V
Key:
< = less than
AL = Action Level
NS = no standard
NTU = Nephelometric Turbidity Unit
ppb = parts per billion
ppm = parts per million
μS/cm = microSiemens/centimeter
TON = Threshold Order Number
pCi/L = picocuries per liter
pCi/L = picocuries per liter

- (1) All results met State and Federal drinking water regulations.
- (2) Turbidity is the water clarity indicator; it also indicates the quality of the water and the treatment system efficiency.
- (3) The turbidity standard for unfiltered supplies is 5 NTU.
- (4) Results are based on monthly average turbidities measured at Tesla Portal.
- (5) Higher turbidities occurred in the Hetch Hetchy system but the water was not served to customers.
- (6) For filtered supplies, two turbidity standards apply. These are: turbidity should be less than 0.3 NTU at least 95% of the time and 1 NTU maximum.
- (7) The reported data is the minimum percent of time that the filtered water has turbidity less than 0.3 NTU.
- (8) DOHS has approved SFPUC's request for a waiver of 76 additional synthetic organic chemicals.
- (9) Total Organic Carbon is a precursor for disinfection byproducts formation. Data obtained from effluent monitoring at Sunol Valley Water Treatment Plant.
- (10) The reported data is the highest running annual average value.
- (11) Data are source water fluoride levels. Fluoride was added at Harry Tracy Plant and Polhemus Fluoride Station to prevent dental cavities in consumers.
- (12) Source water data obtained from Hetch Hetchy, Calaveras, San Antonio, Lower Crystal Springs, San Andreas, Stone Dam, and Pilarcitos Reservoirs.
- (13) Water purchased from SFPUC is fluoridated. The fluoridated supply is blended in the distribution system with our groundwater that is not treated. Generally, fluoride concentration in our system can range from background level to 1.0 ppm.

Note: Additional water quality data may be obtained by calling the SFPUC water system phone number (877) 737-8297

San Bruno Water System Improvements



In order to ensure that the City will be able to deliver the highest quality drinking water to our customers well into the future, we are continuing to make improvements to your water system. In 2003, the City embarked on a significant expansion of its SCADA system (Supervisory Control and Data Acquisition) - a system that enables us to remotely and continuously monitor and control wells, pump stations, water tanks and chemical feed stations. This will greatly enhance both the quality of water as well as the economical operations of our system. The continuous stream of data collected and recorded will better inform the system managers, and will make future decision-making clearer.

IMPORTANT DEFINITIONS TO UNDERSTAND THIS REPORT

The following definitions are for each contaminant analyzed:

Public Health Goal (PHG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U. S. Environmental Protection Agency.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a disinfectant added for water treatment below which there is no known or expected risk of health. MRDLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL)

The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Primary Drinking Water Standard or PDWS

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Variances and Exemptions

State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Waiver

State permission to decrease the monitoring frequency for a particular contaminant.

City of San Bruno **Public Works Department Water Division**

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